CLAIMS

What is claimed is:

1. An isolated nucleic acid comprising a sequence selected from the group consisting of SEQ ID NOS: 80-111, or a fragment, region, or *cis* element of said sequence thereof, said isolated nucleic acid being capable of regulating transcription of an operably linked DNA sequence.
2. The isolated nucleic acid of claim 1 wherein the isolated nucleic acid is a promoter.
3. The isolated nucleic acid of claim 2 wherein the promoter is a hybrid promoter.
4. The isolated nucleic acid of claim 3 wherein said isolated nucleic acid confers enhanced expression of operably linked genes in male reproductive tissues.
5. The isolated nucleic acid of claim 4 further comprising a minimal promoter.
6. The isolated nucleic acid of claim 5 wherein the minimal promoter is selected from the group consisting of a minimal CaMV and a rice actin promoter.
7. The isolated nucleic acid of claim 6 wherein the minimal promoter is a minimal CaMV 35S promoter.
8. A promoter comprising a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111 and fragments thereof.
9. The promoter of claim 8 wherein said promoter confers enhanced expression of operably linked genes in male reproductive tissues.
10. The promoter of claim 9 wherein said male reproductive tissues comprise anthers.
11. A cell comprising a recombinant DNA construct comprising an isolated nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111 or a fragment, region, or *cis* element of said sequence thereof, and operably linked to said nucleic acid sequence, a transcribable DNA sequence and a 3' non-translated region.
12. A transgenic plant comprising a DNA construct comprising an isolated nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111 or a fragment, region, or cis element of said sequence thereof, and operably linked to said nucleic acid sequence, a transcribable DNA sequence and a 3' non-translated region.
13. A method of regulating transcription of a DNA sequence comprising operably linking the DNA sequence to a promoter comprising a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111.

14. The method of claim 13 comprising operably linking the DNA sequence to a hybrid promoter comprising the nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111.

15. The method of claim 13 wherein operably linking the nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111 or fragment thereof to the promoter confers enhanced expression of operably linked genes in male reproductive tissues.

16. The method of claim 15 wherein said male reproductive tissues comprise anthers.

17. The method of claim 13 comprising operably linking a minimal promoter to the nucleic acid sequences selected from the group consisting of SEQ ID NOS: 80-111 or fragment, region, or *cis* element thereof.

18. A method of making a transgenic plant comprising introducing into a cell of a plant a recombinant DNA construct comprising: (i) a promoter comprising a nucleic acid sequence selected from the group consisting of SEQ ID NOS: 80-111 or a fragment, region or *cis* element thereof, and, operably linked to the promoter, (ii) a transcribable DNA sequence and (iii) a 3' non-translated region.

19. A method of isolating at least two 5' regulatory sequences that confer enhanced expression of operably linked genes in male reproductive tissues from a plant comprising:

(i) evaluating a collection of nucleic acid sequences of ESTs derived from at least one cDNA library prepared from a plant cell type of interest;

(ii) comparing EST sequences from at least one target plant cDNA library and at least one non-target cDNA libraries of ESTs from a different plant cell type;

(iii) subtracting common EST sequences found in both target and non-target libraries;

(iv) designing gene specific primers from the remaining EST sequences after said subtraction; and

(v) isolation of the corresponding 5' flanking and regulatory sequences from a genomic library prepared from the target plant comprising the use of said primers.

20. The method of claim 19 wherein said male reproductive tissues comprise anthers.